ABSTRACT OF THE DISCLOSURE

A method and apparatus for use with a three phase AC motor controller linked to a three phase motor, the controller receiving a torque command signal and generating a voltage phase angle as a function of the torque command signal, the voltage phase angle in turn used to generate modulating waveforms to drive a PWM inverter that provides voltages on three motor supply lines, the method comprising the steps of during a commissioning procedure, identifying at least one compensation angle that, when mathematically combined with the voltage phase angle, drives the motor to zero operating frequency when a zero torque command is received and, during normal operation and when a zero torque command is received, mathematically combining the compensation angle and the voltage phase angle to generate a compensated phase angle and using the compensated phase angle to generate the modulating waveforms.